NBII Fisheries and Aquatic Resources Node

Bringing together people and information to promote fisheries conservation

Background

The National Biological Information Infrastructure (NBII) <www.nbii.gov> is an electronic information network that provides access to biological data and information on our nation's plants, animals, and ecosystems. Data and information maintained by federal, state, and local government agencies; non-government organizations; and private-sector organizations are linked through the NBII gateway and made accessible to a variety of audiences including researchers, natural resource managers, decision-makers, educators, students, and other private citizens.

Implementation of the NBII is being accomplished through the development of nodes that serve as interconnected entry points to the NBII and the information held by partners. These nodes function as fully digital, distributed, and interactive systems that focus on developing, acquiring, and managing content on a defined subject area (thematic nodes) or a geographic region (regional nodes). One of the initial thematic nodes created in 2001 was the Fisheries and Aquatic Resources (FAR) Node.

The Node

Fisheries and aquatic resources are economically, ecologically, culturally, and aesthetically important to the nation, yet many of these resources are in decline due to factors such as habitat alteration, degrading water quality, invasive species, water availability, and inadequate stock management. Successful conservation and restoration of these resources requires access to data and information on fish biology, population dynamics, management, hatcheries, water quality, and aquatic habitat and ecosystems. To fill this need, the FAR Node will provide an integrated, comprehensive Web-based resource that will: 1) serve and access fishery and aquatic databases, 2) link to fishery and aquatic resource information sites, and 3) act as a larger scale coordinating site for fisheries and aquatic resources standards. Essentially, the FAR Node will bring together the people and information necessary to promote successful fisheries conservation.

Products

Initial FAR Node efforts have focused on strategic planning and the development of node infrastructure: online mapping and database capabilities and a process for cataloguing existing online fisheries resources. Recent FAR Node products include:

FAR Node strategic plan to guide node content and application development. The Plan was created with the aid of a guidance committee consisting of representatives from a number of different federal, state, and non-government fisheries agencies.

The FAR Node will:

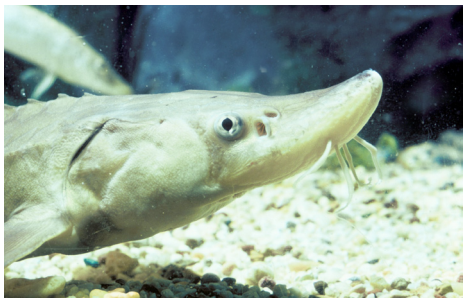
- ***Serve and access fishery and aquatic databases,***
- ***Link to fishery and aquatic resource information sites, and***
- ***Act as a coordinating site for fisheries and aquatic resources standards.***

FAR resource catalog containing FAR-related online tools, data, and informational resources of value to aquatic resource professionals.

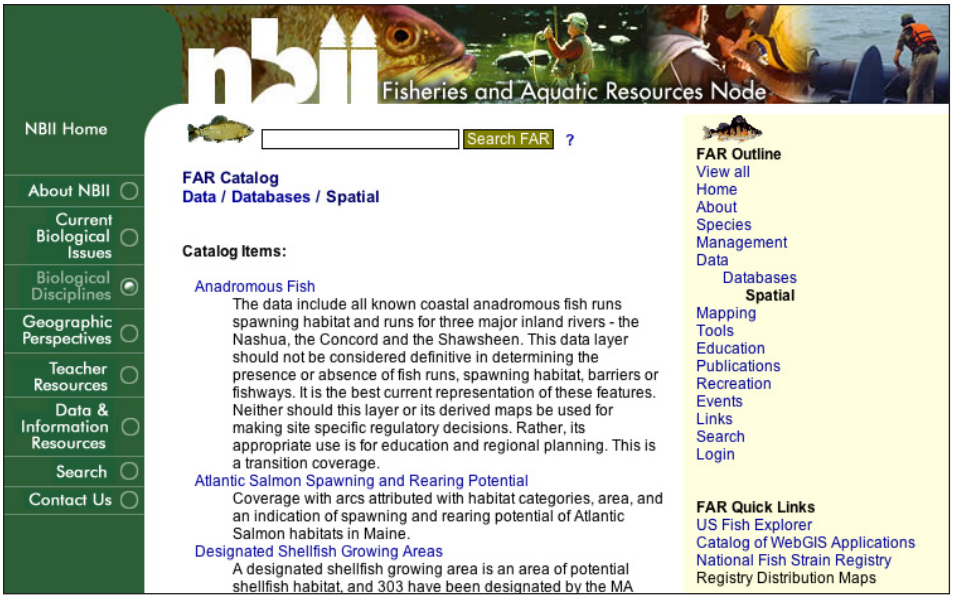
WebGIS catalog containing an index of NBII node Internet mapping applications. Geographic and keyword searches are available.

Projects

Delaware River basin tool will provide managers with an online mapping system that integrates framework, biological, physical, and chemical data maintained by organizations



Sturgeon (left) and brook trout (right). FAR is currently creating information systems for both species. Images from the U.S. Fish and Wildlife Service National Image Library.



FAR resource catalog showing a small portion of content. These identified resources will eventually be associated with a map interface to allow either geographic or keyword searches.

throughout the Delaware River basin.

North American sturgeon information infrastructure will integrate fisheries data to enable analysis of the status and trends of sturgeon populations occurring in the continental United States.

FishBase for the Americas will enhance Western Hemisphere fisheries information within FishBase by incorporating regional search capabilities, South American fisheries biodiversity maps, Columbian fisheries information, and translations from English into both Spanish and Portuguese.

Appalachian brook trout assessment will be created to aid in an assessment of native brook trout status. This native brook trout data management system will encompass the entire native range of the species.

Lower Colorado River aquatic GAP efforts will identify, obtain, and integrate biological, physical, and geographic data sets for the lower Colorado River basin to allow for an aquatic gap analysis of the region.

Partners

Non-Government and Educational
The Penn State Institutes of the Environment ■ FishBase ■ Conservation Management Institute ■ Michigan State University ■ Loftus Consulting ■ Center for Ecology of the Venezuelan Institute for Scientific Investigations ■ International Association of Fish and Wildlife Agencies ■ Atlantic, Pacific, and Gulf States Marine Fisheries Commissions ■ Trout Unlimited

State/Federal
U.S. Geological Survey ■ U.S. Fish and Wildlife Service ■ U.S. Forest Service ■ NOAA-Fisheries ■ Indiana, Wyoming, New York, and other State Natural Resource Agencies ■ Aquatic GAP

International
UN/FAO-Fisheries ■ Inter-American Biodiversity Information Network

For More Information

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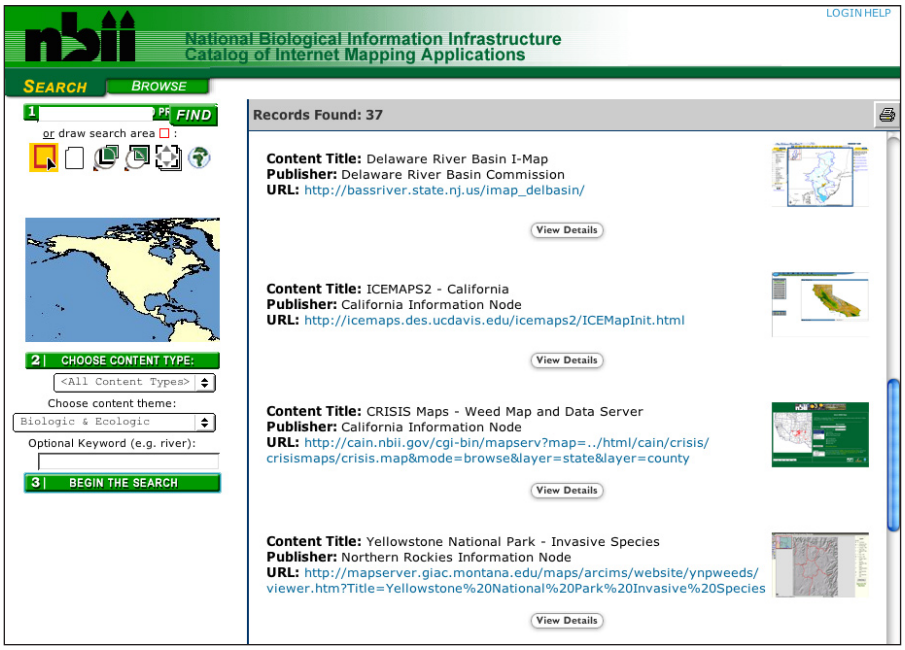

A WebGIS catalog that identifies Internet mapping applications within the NBII nodes. The catalog's functionality will later be combined with content from the FAR resource catalog to allow for easy identification of data by location or species.